



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/072,038

02/07/2002

Aaron J. Shuman

13503US01

1888

7590

07/26/2004

Tyco Electronics Corporation
Suite 450
4550 New Linden Hill Road
Wilmington, DE 19808-2952

EXAMINER

LEON, EDWIN A

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,038

Applicant(s)

SHUMAN ET AL.

Examiner

Edwin A. León

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004 and 14 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 7-9 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and Request for Continued Examination filed April 16, 2004 and May 14, 2004 in which Claims 1, 5, 7 have been amended and Claims 10-16 have been cancelled, have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myer et al. (U.S. Patent No. 5,643,003). With regard to Claim 1, Myer et al. discloses an electrical connector assembly comprising: a plug (10) having a housing (20) with front (25) and rear (opposite of 25) ends, the front end (25) including a mating interface (25), the housing (20) having a top wall (24), a bottom wall (opposite of 24) and side walls (walls shown in Fig. 3); a receptacle (50) having an opening (51) configured to receive the mating interface (25) of the plug (10); a deflectable latch (30) including a beam (31), the beam (31) having a front end (front of 30) secured to the plug

Art Unit: 2833

housing (20) proximate the front end (25) of the plug housing (20), the beam (31) extending from the front end (25) of the plug housing (20) rearward toward the rear end (opposite of 25) of the plug housing (20), the beam (31) having a rear, free-standing end (35) which is biasable towards the plug (10) to permit the plug (10) and receptacle (50) to be mated with one another, the latch (30) further including first and second latching projections (38) that are biasable towards the plug (10) and that extend from opposite sides of the beam (31); and first and second latch mating elements (56, 57) formed within the receptacle opening (51), the first and second latch mating elements (56, 57) being positioned to securely engage the first and second latching projections (38) when the plug (10) and receptacle (50) housings are fully mated with one another. See Figs. 1-3 and 7-9.

However, Myer et al. doesn't show the beam disposed along one of the sidewalls.

Still, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the beam disposed along one of the sidewalls, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Furthermore, it has been concluded that absent any convincing showing of the criticality of the design, this particular design is nothing more than the inventor choice without departing from the scope of the invention. *In re Dailey*, 149 USPQ 47 (CCPA 1976).

With regard to Claim 2, Myer et al. discloses the plug (10) including a cut out portion (below 30) underlying the rear end (35) of the latch beam (31) for permitting increased inward deflection of the latch beam (31) relative to the plug (10). See Figs. 1-3 and 7-9.

With regard to Claim 3, Myer et al. discloses the rear end (opposite of 25) of the latch beam (31) including a beveled inner face (46) for permitting increased inward deflection of the latch beam (31) relative to the plug (10). See Figs. 1-3 and 7-9.

With regard to Claim 4, Myer et al. discloses the first and second latching projections (38) being longitudinally aligned with one another along the length of the latch beam (31). See Figs. 1-3 and 7-9.

With regard to Claim 17, Myer et al. discloses a width of the top wall (24) being greater than a height of the sidewalls (walls shown in Fig. 3). See Figs. 1-3 and 7-9.

With regard to Claim 18, Myer et al. discloses an overall height of the latch (30) being substantially the same as a height of the sidewalls (walls shown in Fig. 3). See Figs. 1-3 and 7-9.

With regard to Claim 19, Myer et al. discloses a distance between outer edges (shown in Fig. 1) of the first and second latching projections (38) being substantially the same as a height of the sidewalls (walls shown in Fig. 3). See Figs. 1-3 and 7-9.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myer et al. (U.S. Patent No. 5,643,003) in view Sawada (U.S. Patent No. 5,692,923). Myer et al. discloses the claimed invention as shown above, except for a plug keying feature

formed along the side wall of the plug housing opposite the latch; and a receptacle

keying feature formed within the receptacle opening for mating with the plug keying feature.

Sawada discloses a similar connector (Fig. 1) having a plug keying feature (13) formed along a side wall of a plug housing (1) opposite a latch (14, 15); and a receptacle keying feature (21) formed within a receptacle opening (17) for mating with the plug keying feature (13). See Fig. 1.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the connector of Myer et al. by including a plug keying feature formed along the side wall of the plug housing opposite the latch; and a receptacle keying feature formed within the receptacle opening for mating with the plug keying feature as taught in Sawada in order to guide the plug when coupling with the receptacle. (Sawada, Column 3, Lines 15-21).

Allowable Subject Matter

5. Claims 5 and 7-9 are allowed for the reasons stated in the Office Actions of August 14, 2003 and February 18, 2004.

Response to Arguments

6. Applicant's arguments with respect to claims 1-9 and 17-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (571) 272-2008. The examiner can normally be reached on Monday - Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gary Paumen
Primary Examiner

Edwin A. Leon
AU 2833